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NATIONAL RISK MANAGEMENT RESEARCH LABORATORY
GROUND WATER AND ECOSYSTEMS RESTORATION RESEARCH

EPA/Shell Oil Pilot-Scale MTBE Adsorption Oxidation Demonstration

Ongoing collaboration between Shell Oil Co. and EPA's Ground Water and Ecosystem Restoration Division has resulted in the pilot-scale evaluation of Fenton-driven regeneration of methyl tert-butyl ether (MTBE)-spent granular activated carbon (GAC). The objectives of the proposed pilot-scale project are to:

- Assess the technical and economic feasibility of chemically regenerating MTBE-spent GAC
- Quantify the percent regeneration
- Develop cost estimates of the treatment process for larger systems
- Develop guidelines for performing the chemical regeneration of GAC in full-scale treatment systems

Development of this technology through demonstration may help reduce annual operating expenses by performing GAC regeneration on-site in the adsorption vessel thus avoiding transportation and handling costs.



MTBE treatment at the Tuller Avenue ground water treatment system

The National Risk Management Research Laboratory's mission is to advance scientific and engineering solutions that enable EPA and others to effectively manage current and future environmental risks.

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